IN THE CLAIMS

The following listing of the claim represents the claims now present in this application. This listing replaces all prior claim listings.

1-19. (canceled)

20. (original) An image signal conversion apparatus for converting a first image signal including a plurality of pixel data into a second image signal including a plurality of pixel data, said image signal conversion apparatus comprising:

first data selection means for selecting, from said first image signal, a plurality of first pixel data adjacent to a subject pixel of said second image signal;

class detection means for detecting a class of said subject pixel based on a plurality of said first pixel data selected by said first data selection means;

information input section for inputting a user identification information;

image quality information obtaining means for obtaining image quality information corresponding to said user identification information input into said information input section; and

pixel data generation means for generating pixel data of said subject pixel corresponding to said class detected by said class detection means and said image quality information obtained from said image quality information obtaining means.

21. (original)   The image signal conversion apparatus according to the claim 20, further comprising memory means for previously memorizing a corresponding-relationship between said user identification information and said image quality information,

wherein said image quality information obtaining means obtains said image quality information with reference to said corresponding-relationship memorized in said memory means.

22. (original)   The image signal conversion apparatus according to the claim 21, wherein said image signal conversion apparatus firer comprises mode modification means for making a test mode for allowing said memory means to memorize said corresponding relationship between said user identification information and said image quality information thereon.

23. (original)   The image signal conversion apparatus according to the claim 20, wherein said pixel data generation means comprises:

coefficient data generation means for generating coefficient data corresponding to said class detected by said class detection means and said image quality information obtained from said image quality information obtaining means,

wherein said coefficient data generation means includes a memory for memorizing said coefficient data of an estimating equation, said coefficient data being previously generated according to every combination of said class detected by said class detection means and said image quality information obtained from said image quality information obtaining means;

second data selection means for selecting, from said first image signal, a plurality of second pixel data adjacent to a subject pixel of said second image signal; and

calculation means for calculating pixel data of said subject pixel using said estimating equation based on said coefficient data generated by said coefficient data generation means and a plurality of said second pixel data selected by said second data selection means.

24. (original)   The image signal conversion apparatus according to the claim 23, wherein said coefficient data generation means comprises:

first memory section for memorizing coefficient data of said estimating equation previously generated according to every combination of said class detected by said class detection means and said image quality information obtained from said image quality information obtaining means;

first data reading means for reading from said first memory section the coefficient data of each class corresponding to the image quality information obtained from said image quality information obtaining means;

second memory section for memorizing the coefficient data of each class read by said first data reading means; and

second data reading means for reading from said second memory section the coefficient data corresponding to said class detected by said class detection means.

25. (original)   An image signal conversion method for converting a first image signal including a plurality of pixel data into a second image signal including a plurality of pixel data, said image signal conversion method comprising:

a first step of selecting, from said first image signal, a plurality of first pixel data adjacent to a subject pixel of said second image signal;

a second step of detecting a class of said subject pixel based on a plurality of said first pixel data selected in said first step;

a third step of obtaining image quality information corresponding to input user identification information; and

a fourth step of generating pixel data of said subject pixel corresponding to said class detected in said second step and said image quality information obtained in said third step.

26. (original)   The image signal conversion method according to the claim 25, wherein said fourth step comprises the steps of:

generating said coefficient data corresponding to said class detected in said second step and said image quality information obtained in said third step;

selecting from said first image signal a plurality of second pixel data adjacent to a subject pixel of said second image signal; and

calculating pixel data of said subject pixel using said estimating equation on the basis of said generated coefficient data and a plurality of said selected second pixel data.

27. (original)   An image display apparatus comprising:

image signal input section for inputting a first image signal including a plurality of pixel data;

image signal conversion means for receiving said first image signal from said image signal input sections converting said first image signal into a second image signal

including a plurality of pixel data, and outputting said second image signal;

image display means for receiving said second image signal from said image signal conversion means and displaying an image formed from said second image signal;

user identification means for identifying the user; and

image quality information obtaining means for obtaining image quality information corresponding to identification identified by said user identification means,

wherein said image signal conversion means includes first data selection means for selecting, from said first image signal, a plurality of first pixel data adjacent to a subject pixel of said second image signal, class detection means for detecting a class of said subject pixel based on a plurality of said first pixel data selected by said first data selection means, and pixel data generation means for generating pixel data of said subject pixel corresponding to said class detected by said class detection means and said image quality information obtained from said image quality information obtaining means.

28. (original)   The image display apparatus according to the claim 27, wherein said user identification means comprises an image identification apparatus.

29. (original)   The image display apparatus according to the claim 27, wherein said pixel data generation means comprises:

coefficient data generation means for generating coefficient data corresponding to said class detected by said class detection means and said image quality information obtained from said image quality information obtaining means,

wherein said coefficient data generation means includes a memory for

memorizing said coefficient data of an estimating equation, said coefficient data being previously

generated according to every combination of said class detected by said class detection means

and said image quality information obtained from said image quality information obtaining

means;

second data selection means for selecting, from said first image signal, a plurality

of second pixel data adjacent to a subject pixel of said second image signal; and

calculation means for calculating pixel data of said subject pixel using said

estimating equation based on said coefficient data generated by said coefficient data generation

means and a plurality of said second pixel data selected by said second data selection means.

30-44. (canceled)

45. (new)   The image signal conversion apparatus according to claim 20, further

comprising conversion method selection means for selecting a conversion method from said first

image signal to said second image signal.

46. (new)   The image signal conversion apparatus according to claim 45,

wherein said conversion method selection means is comprised so as to select said conversion

method selection based on user's input.

47. (new)   The image signal conversion apparatus according to claim 45,

wherein said pixel data generation means generates said pixel data of said subject pixel based on

said conversion method.